

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH
CHILDHOOD LEAD POISONING PREVENTION PROGRAM

POINTERS FOR COLLECTING CAPILLARY
BLOOD LEAD SAMPLES

- Agencies submitting blood lead samples to MDCH Laboratory must first obtain a CLINIC CODE number and supplies from **Jeff Dupler (517) 335-8244**.
- Supplies include a waterproof barrier for the work area, purple top micro-sampling tube, soap and water (or pre-moistened wipe), 1.5 to 1.9 mm one-time use retractable, disposable lancet (**MDCH lab does not supply the lancets or the waterproof barrier**), alcohol wipes, 3 - 4 clean 2 x 2's, latex or vinyl gloves, paper towels, sharps container, biohazard receptacle, bandaids (optional), mailing supplies and MDCH Laboratory form (DCH 0696)
- Assemble all equipment. Ask the parent if the child has any known bleeding tendencies or allergies to latex.
- **TO PREVENT CONTAMINATION, CLEANSING THE SKIN APPROPRIATELY IS THE MOST IMPORTANT PART OF THE PROCEDURE!**
- If the child is less than 1 year old, a heel stick is preferred (distal lateral portion). For all other children, a finger stick on the middle or ring finger is appropriate.
- If a sink is available, scrub the selected finger thoroughly with warm soapy water, rinse with tap water and wrap with a clean paper towel.
- Ask the parent to be seated and hold the child on their lap, securing the child's elbow firmly to assist with the procedure.
- Put on latex or vinyl gloves. If no sink is available, an individually wrapped, pre-moistened wipe may be used to thoroughly scrub the finger. Wipe dry with clean 2 x 2.
- Wipe the cleansed finger with an alcohol wipe. Wipe dry with clean 2 x 2.
- Using a **one-time use, retractable lancet (1.5 mm to 1.9 mm depth)**, hold the lancet firmly to the site. Press on the first joint of the finger with your thumb to make the end of the finger puff out. Make a quick puncture on the distal lateral portion of the clean finger, about halfway between the center of the finger, and the nail bed.
- Wipe away the first drop of blood with a clean 2 x 2.
- Using the micro-sampling tube, touch the capillary tube lightly to the second drop of blood and allow it to flow into the tube by capillary action, holding the finger below the child's heart and the tube in a slightly horizontal position. It is often necessary to gently

press and release the finger at the first joint with your thumb to obtain each drop of blood, but be careful not to squeeze the finger excessively, or touch the capillary tube to the skin. Fill the micro-sampling tube to the 250 microliter mark (approximately 1/4 full). This usually requires 4 - 5 large drops of blood.

- Remove the capillary tube and purple top from the micro-sampling tube and replace it with the second top (attached) **immediately**. Invert the tube gently several times, mixing blood with the EDTA powder in the tube to prevent clotting.
- Wipe the puncture site clean with a dry 2 x 2. If a hemoglobin sample is to be obtained, **THE NEXT FULL DROP OF BLOOD MAY BE COLLECTED FOR ANALYSIS USING THE HEMACUE CUVETTE** and following the Hemacue procedure. Ask the parent to hold pressure on the puncture site with a 2 x 2 while you proceed with the hemoglobin analysis. If needed, a bandaid may be applied, but **only with the parent's permission, as it could be a choking hazard**.
- Carefully label the micro-tube with the child's last name, first name and a unique identifying number (up to 6 digits). Be sure the same unique identifying number is also recorded on the laboratory form.
- Wrap the specimen in a portion of paper towel and place in the inner can. Fold the white copy of the MDCH laboratory form and wrap around the inner can. Up to two specimens may be placed in each inner can, each with a separate Form 0696. Place this package into the outer mailing tube and secure the top with masking tape. Attach postage paid mailing label. If specimens are being sent by courier to MDCH lab, the mailing label is not needed. Mail promptly. Do not allow specimen to be exposed to extreme temperatures. Refrigerate if keeping overnight.
- Discard all used supplies safely, using universal precautions.
- Fill out the Michigan Department of Community Health Laboratory form (DCH 0696) accurately and completely. **THIS INFORMATION MAY BE NEEDED FOR FOLLOW-UP OF THE CHILD!** Don't forget to ask the name of the child's primary care provider and Health Plan (if applicable) and record it on the form.

Prepared by Carol Hinkle, RN, MS
Michigan Department of Community Health
Childhood Lead Poisoning Prevention Program
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